

Abstract

Dental materials based on cationically polymerizable monomers as binders, a polymerization initiator, and based on the dental material, 1-95 wt% of at least one inorganic 5 filler, wherein the binder contains monomers of formula (I):



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wherein R represents hydrogen or a methyl or ethyl group; X and Y independently represent an unsubstituted or substituted aliphatic, cycloaliphatic, or aromatic residue with 1-100 carbon atoms, wherein one or more  $\text{CH}_2$  groups can be replaced by O,  $\text{C}=\text{O}$ ,  $-\text{CO}_2$ ,  $-\text{SiR}^1_2-$ , and/or  $-\text{SiR}^1_2\text{O}-$ , wherein  $\text{R}^1$  independently denotes an alkyl or alkoxy or aryl residue with 1-10 C atoms; 15 n represents a whole number of 1 to 3; and m represents a whole number of 2-5. The new dental compositions have especially low loss of volume, caused by curing, and particularly good characteristics, and short polymerization times.

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